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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/271,249	03/17/1999	TAKASHI SHINZAKI	614.1948	3857

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EXAMINER

GURSHMAN, GRIGORY

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/271,249

Applicant(s)

SHINZAKI ET AL.

Examiner

Grigory Gurshman

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. No amendments to claims 1-30 have been submitted by Applicant.
2. Applicant's arguments with respect to claims 1-30 have been considered but are not persuasive due to the following reasons:
3. Applicant argues that grouping of the claims is inappropriate. Examiner states that broad but reasonable interpretation of the claims has been applied and claims have been grouped according to their scope and subject matter. Therefore grounds of rejection based on grouping of the claims are valid.
4. Referring to the independent claims 1, 19, 27 and 29, Applicant argues that Examiner uses distortion of the teachings of Strait in an effort to justify a combination with Kanevsky. Examiner respectfully disagrees with this assertion of interpretations of teachings of Strait. Referring to the instant claims, Strait discloses a system for normalizing biometric variations to authenticate users from a public database (see abstract). Strait teaches recording (i.e. extracting) the original biometric information and convolving (i.e. converting) the biometric measurements (i.e. extracted feature) – see column 53, lines 50-55. Strait teaches verifying the converted biometric information by comparing the error correcting codewords produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) –see column 2, lines 30-50 and Fig.2, blocks from 54 to 92. Examiner maintains that one of ordinary skill in the art would have been motivated to verify the extracted feature converted biometric information by comparing it against the extracted feature converted biometric

information previously obtained as taught in Strait for securing a cryptographic system based on biometric measurements (see Strait, column 2, lines 60-65). Examiner points out that the motivation to combine the teachings of Kanevsky and Strait is explicitly provided in Strait (column 2, lines 60-65).

5. Referring to Applicant's argument as for meanings of the terms, Examiner points out that the terms in question are well known in the art and equating, for example, the term "convolving the biometric measurements" with the term "converting" is appropriate using the broad interpretation of the claim language.

6. Referring to the independent claims 9, 22, 28 and 30, Applicant argues that Kanevsky fails to teach verifying the converted and extracted feature biometric information by comparing it against the converted and extracted feature biometric information previously obtained. Examiner agrees and points out that this very fact was explicitly stated in the rejection. However, as pointed out herein Strait teaches these features. Combination of Kanevsky and Strait renders claims 9, 22, 28 and 30 obvious. For the reasons stated herein, the rejection of claims 1, 19, 27, 29 and 9, 22, 28 and 30 is maintained.

7. With regard to erroneously citing anticipation under 102(e) for rejection of claims 17, 25, 31-33, examiner has corrected the record.

Referring to the instant claims, Applicant argues the teachings of Strait, much the same way is done in reference to other claims. Examiner points out that while Priddy does not explicitly teach verifying the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously

obtained. This feature is taught by Strait. Strait teaches verifying the converted biometric information by comparing the error correcting codewords produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) –see column 2, lines 30-50 and Fig.2, blocks from 54 to 92. Therefore the combination of teachings of Priddy and those of Strait renders the claims 17, 25, 31-33 obvious.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-16, 18-24 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky (U.S. Patent No. 6,092,192) in view of Strait (U.S. Patent No. 6,038,315).

10. Referring to the instant claims, Kanevsky discloses a method for repetitive enrollment in a biometric recognition system (see title and abstract).

Referring to claims 1, 9, 14 and 18, Kanevsky teaches the method of extracting, processing and recognizing the biometric information of the user (see abstract and Fig 2). The limitation “measuring means for measuring biometric information” is met by a spoken utterance (see column 4, lines 60-65 and Fig 3), which receives the biometric

(voice) sample. The limitation "converting means for carrying out a predetermined conversion process" is met by encryption device (see Fig 3).

"Extracting feature information from the converted biometric information" is met by an extractor for extracting a biometric attribute from a user (see column 3, line 40).

Kanevsky teaches comparing previously stored sample with the contemporaneously provided sample (see column 4, line 15) within the biometric verification system (see column 6, line 5). The limitation "biometric information of individuals which was previously obtained and registered in advance" is met by storing biometric attribute in a memory device of a server (see column 3, line 40). Kanevsky, however, does not explicitly teach verifying the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously obtained. Referring to the instant claims, Strait discloses a system for normalizing biometric variations to authenticate users from a public database (see abstract). Strait teaches recording (i.e. extracting) the original biometric information and convolving (i.e. converting) the biometric measurements (i.e. extracted feature) – see column 53, lines 50-55. Strait teaches verifying the converted biometric information by comparing the error correcting codewords produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) –see column 2, lines 30-50 and Fig.2, blocks from 54 to 92.

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to verifying the extracted feature converted biometric information of Kanevsky by comparing it against the extracted feature converted biometric

information previously obtained as taught in Strait. One of ordinary skill in the art would have been motivated to verify the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously obtained as taught in Strait for securing a cryptographic system based on biometric measurements (see Strait, column 2, lines 60-65).

11. Referring to claims 2, 3, 10 and 11, the limitation "personal information related to the individual as the parameters" are met by password and decryption key (see column 8, line 40).

12. Referring to claims 4, 7, 8 and 12, the limitations recited in these claims are met by Fig 1, which shows a network with the client computers where the extraction and encryption takes place and the server where verification takes place. The limitation "enciphering key" is met by the encryption keys (see column 7, line 55-65).

13. Referring to claims 5, 6, 13 -16, 19 - 24, 26 - 30, Kanevsky teaches the use of a server memory device(see abstract), which constitutes "recording medium", recited in the instant claims.

14. Claims 17, 25 and 31-33 are rejected under 35 U.S.C. 103(a) as being anticipated by Priddy (U.S. Patent No. 5,984,366) in view of Strait (U.S. Patent No. 6,038,315).

15. Referring to the instant claims Priddy discloses a system for creating and authenticating self-verifying articles (see abstract). The limitation "converting means for carrying out a predetermined conversion process " is met by computer, which includes the necessary encodation (conversion) algorithms (see column 5, lines 28 - 29).

Priddy teaches encoding the biometric data by using at list compression algorithms (see column 7, lines 33 -35). Priddy, however, does not explicitly teach verifying the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously obtained. Referring to the instant claims, Strait discloses a system for normalizing biometric variations to authenticate users from a public database (see abstract). Strait teaches recording (i.e. extracting) the original biometric information and convolving (i.e. converting) the biometric measurements (i.e. extracted feature) – see column 53, lines 50-55. Strait teaches verifying the converted biometric information by comparing the error correcting codewords produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) –see column 2, lines 30-50 and Fig.2, blocks from 54 to 92.

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to verifying the extracted feature converted biometric information of Priddy by comparing it against the extracted feature converted biometric information previously obtained as taught in Strait. One of ordinary skill in the art would have been motivated to verify the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously obtained as taught in Strait for securing a cryptographic system based on biometric measurements (see Strait, column 2, lines 60-65).

Conclusion

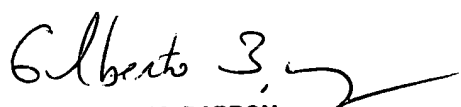
16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (703) 306-2900. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


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